
Robert L. Snyder Jr.

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EDUCATION

- Ph.D. in Biology** 2009
University of Missouri, Columbia, Missouri
Major: Ecology, Evolution and Behavior
Advisor: Dr. Reginald B. Cocroft
Dissertation title: *Diversification in plant feeding insects: patterns of host-plant specialization and mating signal evolution inferred from species-level phylogeny and population genetics*
- M.S. in Entomology & Applied Ecology** 2001
University of Delaware, Newark, Delaware
Advisor: Dr. Charles Mason
Thesis title: *Ovipositional Deterrents of Ostrinia nubilalis Hubner. (Lepidoptera: Crambidae).*
- B.S. in Biology & Ecology** 1996
West Chester University of Pennsylvania, West Chester, Pennsylvania

PROFESSIONAL EXPERIENCES

- Associate Professor**, *State University of New York at Potsdam* 2014 - present
Assistant Professor, *State University of New York at Potsdam* 2009 - 2014
Instructor, *State University of New York at Potsdam* 2008 - 2009

TEACHING EXPERIENCES

Non-majors
Ecology and Evolution
Introduction to Human Genetics
Biological Concepts (Early childhood Education) lecture & lab

Biology courses
General Biology 1 lecture & lab
Ecology Lecture & Lab
Genomics
Genome evolution research
Entomology
Population Ecology
Molecular Ecology
Animal Communication
Microbial Diseases & Arthropod vectors

TEACHING INTERESTS

- Molecular Ecology
- Evolution
- Insect Plant Interactions
- Animal Speciation
- Entomology
- Ecology
- Phylogenetics
- Genomics
- Bioinformatics

UNDERGRADUATE RESEARCH ADVISEES

Jennifer Alden	Male mating signal variation in <i>Enchenopa</i> treehoppers S2009 - Kilmer Undergraduate Research Apprenticeship S2010
Lindsey Simons	Male mating signal variation in <i>Enchenopa</i> treehoppers S2009
Justin McNally	Survey of symbiotic bacteria in <i>Enchenopa</i> treehoppers 2009-2012 - Kilmer Undergraduate Research Apprenticeship S2010, F2010, Full year 2011/12 - Beta Beta Beta National research award 2011
Laurie Swaney	Convergent evolution of bizarre insect shapes: An application of DNA barcoding S2009 - Kilmer Undergraduate Research Apprenticeship S2009
Ryan Zanghi	Genetic characterization of a new population of <i>Enchenopa</i> on <i>Dirca</i> F2010
Timothy Argeroplos	PCR and cloning of Treehopper primary symbionts S2011
Dylan Kent	Distribution of <i>Enchenopa binotata</i> in the Adirondack Park 2011-2012 - Kilmer Undergraduate Research Apprenticeship 2011/12
Christerpher Clark	Molecular phylogenetics of the North American Oak treehoppers - Kilmer Undergraduate Research Apprenticeship S2012
Sean Atkinson	Confirmation of <i>Sulcia muelleri</i> in the <i>Enchenopa binotata</i> species complex
Matthew Riggi	Diversification of gut symbionts in Telamonini and Smilliini Treehoppers (Insecta: Membracidae): Using evolutionary genetics - Kilmer Undergraduate Research Apprenticeship 2013/2014
Rachel Fay	Genome sequencing of the bacterial co-symbionts of <i>Enchenopa binotata</i> 2013-2016 - Kilmer Undergraduate Research Apprenticeship 2014/2016 - Beta Beta Beta National research award 2015

RESEARCH PRESENTATIONS

Invited

- **R.L. Snyder.** 2012. Chinese Academic of Science – South China Botanical Gardens. Sympatric speciation via host-plant shifting in insects.
- **R.L. Snyder.** 2012. St. Lawrence University Biology department seminar. Population genetic divergence and behavioral isolating barriers in insect speciation
- **R.L. Snyder.** 2010. SUNY Plattsburgh. Population genetic divergence and behavioral isolating barriers in insect speciation.
- **R.L. Snyder.** 2010. University of Nebraska – Lincoln. Ecology, Evolution and Behavior Program. Population genetic divergence corresponds with behavioral isolating barriers in a host-plant specializing insect
- **R.L. Snyder.** 2009. Clarkson University Biology Department, Population genetic divergence corresponds with behavioral isolating barriers in a host-plant specializing insect
- **R.L. Snyder.** 2009. SUNY Potsdam Biology department, Mating signal variation and ecological speciation in plant-feeding insects.
- **R.L. Snyder, C.P. Lin and R.B. Cocroft.** 2005. Phylogeography of the *Enchenopa binotata* (Say) Sympatric Species Complex. 12th International Auchenorrhyncha Congress. Berkeley, CA

Presented

- Fay, R.* , M. Riggi*, J. McNally*, **R.L. Snyder.** 2015. The Mini Monsters Of Mini Monsters: The Role Of Microbial Symbionts In Diversification Of Treehoppers. NCUR 2015 (National Conferences on Undergraduate Research), Spokane WA.
- McNally, J.* and **R.L. Snyder.** 2012. Endosymbiont diversity of Northern New York *Enchenopa binotata* treehoppers. Poster. **Annual Meeting of the Entomological Society of America, Eastern Branch, Hartford, CT.**

- Kent, D.* and **R.L. Snyder**. 2012. Does mother know best? A survey of ovipositional location in the two-spotted tree hopper *Enchenopa binotata*. Poster. **Annual Meeting of the Entomological Society of America, Eastern Branch, Hartford, CT.**
- **R.L. Snyder** and R. B. Cocroft. 2009. Genetic divergence corresponds with bimodal mating signal variation in populations of *Enchenopa binotata* (Insecta: Hemiptera). Poster. **Evolution annual meeting 2009, University of Idaho, Moscow ID.**
- **R.L. Snyder** and J. Schul. 2008. Multiple origins of novel call traits in *Neoconocephalus* katydids. Poster. **Evolution annual meeting 2008, University of Minnesota, Minneapolis, MN.**
- **R.L. Snyder**, C.P. Lin and R.B. Cocroft. 2006. The monophyletic origin of the *Enchenopa binotata* complex: A phylogeographic test of a sympatric speciation via host shift. Poster. **Genetics of Speciation, American Genetic Association Annual Symposium. Vancouver, BC**
- **R.L. Snyder**, C.P. Lin and T. K. Wood. 2003. Molecular Phylogeny of the Membracidae. Poster. **Annual Meeting of the Entomological Society of America. Cincinnati, OH**
- **R.L. Snyder** and T. K. Wood. 2002. Molecular Data in Biodiversity Surveys: a Case Study of the Treehoppers of Panama. Talk. **Annual Meeting of the Entomological Society of America. Ft. Lauderdale, FL**
- M. S. Cast, Lin, C.P., **R. L. Snyder**, Cai, N., and T.K. Wood. 2002. A Molecular Phylogenetic Analysis of the Treehopper Subfamily Smiliinae (Hemiptera: Membracidae). Talk. **Annual Meeting of Entomological Society of America. Ft. Lauderdale, FL**
- **R.L. Snyder**, C.P. Lin and T. K. Wood. 2001. Utility of DNA Sequences to Associate Treehopper nymphs with Adults. Talk. **Annual Meeting of the Entomological Society of America., San Diego, CA**
- F. W. Stearns, **R. L. Snyder**, M. S. Cast, and Wood T.K. 2001. *Enchenopa* (Hemiptera: Membracidae): Five Years After Experimental Host Shifts. Talk. **Annual Meeting of Entomological Society of America. San Diego, CA**
- **R.L. Snyder** and C.E. Mason. 1999. Ovipositional Deterrents of the European corn borer (*Ostrinia nubilalis* Hubner). Student presentation competition. Talk. **Annual Meeting of the Entomological Society of America. Atlanta, GA**
- **R.L. Snyder** and C.E. Mason. 1999. Ovipositional Deterrents of the European corn borer (*Ostrinia nubilalis* Hubner) in Domestic Tomatoes. Talk. **Entomological Society of America, Eastern Branch Meeting. Virginia Beach, VA**

*Presentations with SUNY Potsdam students.

PUBLICATIONS

Resubmitted: Frederick, K.H., R. L. Snyder and J.S. Schul. Distinct call phenotypes persist despite incomplete lineage sorting, gene flow and low genetic diversity in a group of acoustic katydids. (rejected with revision F2013, resubmitted S2014: Molecular Ecology)

Snyder, R.L., K.H. Fredrick, and J.S. Schul. 2009. Molecular Phylogenetics of the Genus *Neoconocephalus* (Orthoptera, Tettigoniidae) and the Evolution of Temperate Life Histories. **PLoS One**. 4(9): 1-9.

Rodríguez, R.L., L. M. Sullivan, **R. L. Snyder** and R. B. Coccoft. 2008. Host shifts and the beginning of signal divergence. **Evolution**. 62: 12-20.

Golden, G.T., T. N. Ferraro, G.G. Smith, **R.L. Snyder**, N.L. Jones and W.H. Berrettini. 2001. Acute Cocaine-induced Seizures: Differential Sensitivity of Six Inbred Murine Strains. **Neuropsychopharmacology**. 24(3): 291-99.

Ferraro, T.N., G.T. Golden, G.G. Smith, R. Longman, **R.L. Snyder**, D. Demuth, I. Szpilzak, N. Mulholland, E. Eng, F. Lohoff, R.J. Buono, W. H. Berrettini. 2001. Quantitative Genetic Study of Maximal Electroshock Seizure Threshold in Mice: Evidence for a Major Seizure Susceptibility Locus on Distal Chromosome 1. **Genomics**. 75: 35-42.

Golden G.T., T. N. Ferraro, G. G. Smith, D. M. DeMuth, **R. L. Snyder** and W. Berrentini. 2000. Cocaine-induced kindling in rats: susceptible and resistant inbreed strains. **Society for Neuroscience Abstract**

Snyder, R.L. and C.E. Mason. 1999. Ovipositional deterrents of the European corn borer from Tomatoes. **Reports of the NC-205, Regional Technical Committee**.

Mason, C.E. and **R.L. Snyder**. 1999. Comparison of Cone and Paper Pheromone Traps for Sampling European Corn Borer. **Proceedings of NE Crop Insect Working Group**.

Ferraro, T. N., G.T. Golden, **R. Snyder**, M. Laibinis, G.G. Smith, R.J. Buono and W.H. Berrettini. 1998. Genetic Influences on Electrical Seizure Threshold. **Brain Research**. 813: 207-210.

Smith, G.G., G.T. Golden. T.N. Ferraro. **R.L. Snyder**. T.A. Hare. W.H. Berrettini. 1997. Genetic Sensitivity to Cocaine-Kindled Seizures. **Society for Neuroscience Abstract**

INTERNATIONAL FIELD RESEARCH

- **Nepal** *Hypsauchenia* (Insecta: Membracidae) of the Annapurna region 2012
- **Peoples Republic of China** Ecosystems of Western China and Central Asia 2012
- **Peoples Republic of China** (SUNY Potsdam professional development) Gaoligongshan Diversity 2011
- **Trinidad** (Schul: National Science Foundation): Tettigoniidae collection 2007
- **Ecuador** (Coccoft & Lin: National Geographic Society): Membracidae social communication 2006
- **Peoples Republic of China** (Univeristy of Delaware Treehopper Fund): Membracidae collection 2003
- **Honduras** (Lin: National Science Fundation): Membracidae natural history observations and collection 2001
- **Guatemala** (Lin: National Science Fundation): Membracidae natural history observations and collection 2001
- **Dominican Republic** (UD Treehopper Fund): Membracidae natural history observations and collection 2000

PROFESSIONAL SERVICE AND ASSOCIATIONS

- **Center for Creative Instruction (SUNY Potsdam):** Board member 2015-present
- **Biology department curriculum committee,** 2013-present
- **Biology department Long term planning committee,** 2012-13
- **Chair, Biology department Microbiologist search committee,** 2010
- **General Biology curriculum committee,** SUNY Potsdam 2010
- **LTEC advisory board** 2010-2011
 - LTEC award committee 2012-present
 - Faculty-TE committee 2010-2012
- **Faculty advisor of Skiing and Riding Club,** at SUNY Potsdam 2010 – present
- **Biology Department seminar series coordinator,** Fall 2009 and Fall 2010, Fall 2011, Spring 2016
- **Elected member SUNY Potsdam, Faculty Senate, Student Affairs Committee** 2009-2011
- **Faculty advisor of Beta Beta Beta,** Lambda Xi chapter at SUNY Potsdam 2009 – present
- **Science Olympiad,** at SUNY Potsdam, Spring 2014, Spring 2015 (Entomology)

AWARDS

Osterberg Ecological grant (2014)

Proposal title: Role of Bacterial symbionts in Insect speciation

Title III Strengthening Institutions Grant, Spring 2010 (co-PI)

Proposal title: Increasing Student Research: An Interdisciplinary Approach

Research & Creative Endeavors Award Spring 2009

Proposal title: The role of Song Evolution in Speciation in the *Enchenopa binotata* of Treehoppers.

Robert J. Hill '77 Endowment for Environmental Science grant (2009)

Co-PI with Glenn Johnson: Proposal title: Incorporating laboratory experiences and research opportunities into the Ecology curriculum.

Superior Graduate Achievement Award (<http://gsa.missouri.edu/sgaa.shtml>)

Top recipient, in recognition of graduate achievement, 2007-2008 academic year

- Peer determined based on teaching, research, service, advising, activism, community service, mentoring
- Awarded by University of Missouri Graduate Student Association

Speciation of Genetics Grant (<http://jhered.oxfordjournals.org/cgi/content/full/esl066v1>)

Cosponsored by American Genetic Association (AGA) and Molecular Ecology, 2006

- Financial support to attend AGA annual symposium in Vancouver, BC, Canada

PROFESSIONAL DEVELOPMENT

- **Genomics Education Partnership (Washington University)**
- **Genomics of Tropical Biodiversity Working Group**
- **Associated Colleges of the St. Lawrence Valley**